

Amendments to the Claims

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of claims

1. (Currently amended) Method for determining whether a substance is a modulator of a target component in a cell an ion-channel/receptor system containing a ligand controlled or mechanically controlled ion channel, comprising the steps of:
 - (a) preparing a cell, which contains the target component ion-channel/receptor system, wherein the cell is immobilized on an extracellular potential-sensitive electrode,
 - (b) bringing a substance to be tested in contact with the cell, in a medium which has a total salt concentration of \leq 100 mmol/L,
 - (c) measuring a signal at the electrode due to the target component ion-channel/receptor system, and
 - (d) determining the effect of the substance to be tested on the measurement signal.

2-4. Canceled.

5. (Currently amended) Method according to Claim [[4]]_1, characterized in that the ion channel is a potassium channel.

6. Canceled.
7. (Currently amended) Method according to Claim [[3]]1, characterized in that the ion-channel/receptor system contains an NMDA, GABA, AMPA or acetylcholine receptor.
8. (Currently amended) Method according to Claim 1, furthermore comprising stimulation of the target component in the cell ion-channel/receptor system.
9. (Currently amended) Method according to Claim 8, characterized in that the stimulation of the target component ion-channel/receptor system comprises electrical, optical or/and chemical stimulation.
10. (Currently amended) Method according to Claim 9, characterized in that the stimulation of the target component ion-channel/receptor system comprises the application of a DC voltage or an AC voltage.
11. Canceled.
12. (Previously presented) Method according to Claim 1, characterized in that the potential-sensitive extracellular electrode is arranged on a chip.

13. (Previously presented) Method according to Claim 1, characterized in that an array comprising a multiplicity of cells immobilized on different electrodes is prepared, and a multiplicity of substances are tested.

Claims 14-23. (Canceled)